DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132-5190

N00217.004022
HUNTERS POINT
SSIC NO. 5090.3

IN REPLY REFER TO:

5090
Ser 06CH.KF/0556
June 9, 2004

Mr. Tom Lanphar
Department of Toxic Substances Control
700 Heinz Avenue, Bldg. F, Suite 200
Berkeley, CA 94710

Mr. Jim Ponton
California Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Steve McAdam
Deputy Director
San Francisco Bay Conservation and Development Commission
50 California Street, 26th Floor
San Francisco, CA 94111

SUBJECT: IDENTIFICATION OF STATE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARs) FOR THE DRAFT FEASIBILITY STUDY FOR PARCEL D AT HUNTERS POINT SHIPYARD

Reference: (a) Federal Facilities Agreement (U.S. Environmental Protection Agency [EPA] and US Department of the Navy [Navy]) for Hunters Point Annex in San Francisco, California, November 15, 1991

(b) Memorandum of Understanding Between the Department of Health Services, the State Water Resources Control Board, and the Regional Water Quality Control Board for Cleanup of Hazardous Waste Sites of August 1, 1990

Dear Regulatory Members:

The Navy is preparing a Feasibility Study that evaluates remedial alternatives to reduce risks to human health and the environment at Hunters Point Shipyard (HPS) Parcel D. As a part of this process, the Navy would appreciate your input on its determination of the potential ARARs that will need to be considered. The Navy previously requested state ARARs for Parcel D. The Navy is requesting state ARARs a second time because several years have elapsed since the previous request.

Therefore, pursuant to paragraph 7.6 of reference (a) and consistent with Section V.A.2 of reference (b), the Navy is hereby requesting that your agency identify potential state chemical-, location-, and action-specific ARARs for Parcel D at HPS.

Parcel-specific site characterization information is available in the following documents:

- PRC Environmental Management, Inc. (PRC), Levine-Fricke-Recon, Inc., and Uribe and Associates. 1996. "Parcel D Remedial Investigation, Draft Final Report, Hunters Point Shipyard, San Francisco, California." October 25.
- Navy. 2004. "Draft Action Memorandum Time-Critical Removal Action for the Parcel D Soil Excavation Sites, Hunters Point Shipyard, San Francisco, California." February 24.
- Tetra Tech EM Inc. (Tetra Tech). 2001. "Final Groundwater Beneficial Use for A-aquifer Parcels C, D, and E, Hunters Point Shipyard, San Francisco, California." April 12.
- Tetra Tech. 2002. "Draft Parcel D Revised Feasibility Study Hunters Point Shipyard, San Francisco, California." March 8.
- Tetra Tech. 2004. "Draft Work Plan Time-Critical Removal Action for Parcel D Excavation Sites, Hunters Point Shipyard, San Francisco, California." February 27.

Enclosure (1) provides a list of chemicals of potential concern (COPC) by Installation Restoration Program site for soil and groundwater. A list and description of remedial technologies and process options that are currently being evaluated for remedial alternatives at Parcel D is provided as enclosure (2). The COPCs are defined as any organic chemical detected at a concentration that exceeds an excess lifetime cancer risk of 1E-06 or a hazard quotient of 1, or any metals at levels that exceed the Hunters Point Ambient Levels (HPAL). The information presented in the documents cited above and the enclosures to this letter should allow you to identify, with specificity, state chemical-, location-, and action-specific ARARs for Parcel D.

To ensure the Navy can thoroughly evaluate state identified ARARs, please include the following information in your response:

(1) A specific citation to the statutory or regulatory provisions for the state ARAR and the date of enactment or promulgation.

(2) A brief description of why the state ARAR is applicable or relevant and appropriate.

(3) A description of how the state ARAR would apply to the potential remedial actions identified in Enclosure 2.

(4) The rationale and technical justification for using a state ARAR if your agency regards its proposed ARAR as more stringent than the corresponding federal ARAR.

(5) Any advisories, criteria, or guidance that your agency thinks should be considered and a brief description and justification as to why it should be considered.

(6) A request for any data required if your agency needs more information to fully respond to this request.

Timely identification of potential state ARARs is necessary for continued progress toward response actions at Parcel D, and is required under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 *United States Code* Section 9621(d)(2)(A), and the National Oil and Hazardous Substance Pollution Contingency Plan, 40 *Code of Federal Regulations* Sections 300.400(g) and 300.515(d) and (h). Timely identification of state ARARs is defined as a written response received by the lead agency (the Navy) within 30 working days of receipt of the request. Therefore, the Navy requests a response by your agency to this letter by Monday, July 12, 2004. Please send your response via first class mail addressed to this Command, attention: Mr. Keith Forman. Please direct any technical questions to the undersigned at (619) 532-0913, and any legal questions to Mr. Nick Bollo at (619) 532-0909.

Sincerely,

KEITH FORMAN
BRAC Environmental Coordinator
By direction of the Commander

Enclosures: (1) Table 1, Chemicals of Potential Concern in Soil and Groundwater
(2) Table 2, Potential Remedial Technologies and Process Options

Copy to:

Mr. Michael Work (SFD 8-3)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Ms. Amy Brownell
Department of Public Health
1390 Market Street, Suite 910
San Francisco, CA 94102

Ms. Julia Vetromile (w/o Encl)
Tetra Tech EM Inc
135 Main Street, Suite 1800
San Francisco, CA 94105

TABLE 1: CHEMICALS OF POTENTIAL CONCERN IN SOIL AND GROUNDWATER

Parcel D, Hunters Point Shipyard, San Francisco, California

IR Site	Analytic Group	COPC[a]
SOIL CHEMICALS OF POTENTIAL CONCERN		
IR-08	PAH	Benzo(a)pyrene
IR-09	PAH	Benzo(a)pyrene
	Metals	Chromium VI[b] and Lead[b]
IR-16	PAH	Benzo(a)pyrene
IR-22	PAH	Benzo(a)pyrene and Benzo(b)fluoranthene
IR-32	PAH	Benzo(a)pyrene
IR-33N	Metals	Arsenic and Lead
	PAH	Benzo(a)pyrene
IR-33S	PAH	Benzo(a)pyrene
IR-34	PAH	Benzo(a)pyrene
IR-35	PAH	Benzo(a)pyrene and Benzo(b)fluoranthene
	PCBs	No specific Aroclor detected[b]
IR-37	Metals	Copper
	PAH	Benzo(a)pyrene
IR-38	PAH	Benzo(a)pyrene
IR-39	PAH	Benzo(a)pyrene[b]
IR-53	PAH	Benzo(a)pyrene
IR-55	PAH	Benzo(a)pyrene
	Metal	Arsenic
IR-68	PAH	Benzo(a)pyrene
	Metals	Lead[b]
IR-69	Metals	Lead[b]
IR-70	PAH	Benzo(a)pyrene[b]
	Metals	Arsenic and Lead[b]
GROUNDWATER CHEMICALS OF POTENTIAL CONCERN[c]		
IR-09	Metals	Chromium VI, Cyanide, and Vanadium
	VOCs	Trichlorethylene
IR-71	SVOCs	1,4-dioxane
	VOCs	Trichlorethylene, Benzene, Toluene, Ethylbenzene, and Xylene
IR-22	Metals	Cyanide, Lead, and Zinc
IR-33	Metals	Chromium VI, Copper, Molybdenum, and Vanadium
	VOCs	Benzene, Toluene, Ethylbenzene, and Xylene
	PAH	Anthracene
	TPH	TPH

TABLE 1: CHEMICALS OF POTENTIAL CONCERN IN SOIL AND GROUNDWATER (Continued)

Parcel D, Hunters Point Shipyard, San Francisco, California

Notes:

a	This table lists COPCs based on analytes detected in soil at concentrations that exceed an ELCR of 10^{-6} or a hazard index of 1 from that chemical from the draft revised feasibility study (Tetra Tech 2002).
b	HPS PRGs and toxicity values for several compounds have changed since the last risk evaluation in the draft revised feasibility study. These COPCs were identified in the draft TCRA action memorandum (Navy 2004) as contributing to risk. Subsequently, no interim removal actions were taken, and the sites will be evaluated in the feasibility study.
c	Groundwater COPCs were identified from the "Draft Sampling and Analysis Plan for the Basewide Groundwater Monitoring Program" (Tetra Tech 2003)

COPC	Chemical of potential concern
ELCR	Excess lifetime cancer risk
HPS	Hunters Point Shipyard
IR	Installation Restoration
NA	Not applicable
PAH	Polynuclear aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PRG	Preliminary remediation goal
SVOC	Semivolatile organic compound
TCRA	Time-critical removal action
Tetra Tech	Tetra Tech EM Inc.
TPH	Total petroleum hydrocarbons
VOC	Volatile organic compound

Sources:

Navy. 2004. "Draft Work Plan Time-Critical Removal Action for Parcel D Excavation Sites, Hunters Point Shipyard, San Francisco, California." February 27.

Tetra Tech. 2002. "Draft Parcel D Revised Feasibility Study, Hunters Point Shipyard, San Francisco, California." March 8.

Tetra Tech. 2003. "Draft Sampling and Analysis Plan for the Basewide Groundwater Monitoring Program, Hunters Point Shipyard, San Francisco, California." December 18.

TABLE 2: POTENTIAL REMEDIAL TECHNOLOGIES AND PROCESS OPTIONS

Parcel D, Hunters Point Shipyard, San Francisco, California

Remedial Technology Alternative	Description
SOIL OPTIONS	
Land Use Controls	Applying deed restrictions on future excavation and construction. Deed notifications would inform future property owners of the presence of contaminated soil. Land use controls would vary depending on future land use at Parcel D, but are intended to limit exposure pathways by restricting on-site activities.
Containment via Capping	Installation of a cap, including the following options: clay, asphalt, and concrete single-layer capping and soil-synthetic membrane-clay multilayer capping. Site preparation requirements for capping at Parcel D would require removal of existing asphalt and demolition of buildings, utility poles, and other miscellaneous aboveground structures. In addition, caps would require long-term maintenance to prevent erosion of the cap material.
Excavation and Off-Site Disposal	Removal of contaminated soil with typical excavation equipment and backfilling with clean fill. Exposure to occupational workers via ingestion, dermal contact, or ingestion of contaminated soil. Additional considerations include control of fugitive dust, physical obstructions to excavation, and intrusion of groundwater into excavation areas. Excavated soil will be transported to an off-site Class I, II, or III landfill facility. Soil transported to a Class I facility may require additional treatment such as stabilization (although not likely).
GROUNDWATER OPTIONS	
Land Use Controls	Applying deed restrictions to restrict future access to groundwater. Deed restrictions would inform future property owners that contaminated groundwater is present at the site and restrict installation of groundwater extraction wells. Deed restriction for requiring newly constructed buildings to install vapor barriers to prevent exposure to volatile organic compounds. Land use controls would vary depending on future land use at Parcel D.
In-Situ Groundwater Treatment	In-situ groundwater treatment may be accomplished using technologies such as zero-valent iron injection or enhancement of natural biodegradation.
Monitored Natural Attenuation	Biological activity and contaminant concentrations in groundwater are monitored through periodic sampling and analysis of a specific group of wells. Monitoring and reporting requirements provide data to evaluate whether natural biological systems are breaking down contaminants and whether contaminants are migrating further.
Groundwater Monitoring	Periodic sampling and analysis of current groundwater monitoring wells would determine hazardous levels in groundwater, whether contamination is migrating off site, and whether continued monitoring is required.

TETRA TECH EM INC.

TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. N67811-02-D-8213 Document Control No. DS.A500.14176

TO: Mr. Ron Fuller, Code 02R1.RF
Contracting Officer
Naval Facilities Engineering Command
Southwest Division
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517

DATE: 6/10/04
DO: 0002
LOCATION:
Hunters Point Shipyard, San Francisco

FROM: _____
Michael Wanta, Contract Manager

DOCUMENT TITLE AND DATE:

Identification of State Applicable or Relevant and Appropriate Requirements (ARARs) for the Draft Feasibility Study for Parcel D at Hunters Point Shipyard, June 9, 2004

TYPE: ☐ Contractual Deliverable ☒ Technical Deliverable (DS) ☐ Other (TC)

VERSION: _____ REVISION #: _____
(e.g., Draft, Draft Final, Final)

ADMIN RECORD: Yes ☒ No ☐ CATEGORY: Confidential ☐

SCHEDULED DELIVERY DATE: 6/9/04 ACTUAL DELIVERY DATE: 6/10/04

NUMBER OF COPIES SUBMITTED TO NAVY: O/5C/5E

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